

Notice of Allowability	Application No.	Applicant(s)	
	10/697,263	WEI ET AL.	
	Examiner Maryam Monshipouri	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
 with (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS
 CE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative
 e Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

]
 This communication is responsive to _____.

]
 The allowed claim(s) is/are 24,27-31 and 36-49.

]
 The drawings filed on 4/31/03 are accepted by the Examiner.

]
 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

licant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements ed below. Failure to timely comply will result in ABANDONMENT of this application.

IS THREE-MONTH PERIOD IS NOT EXTENDABLE.

]
 A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

]
 CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

 1) hereto or 2) to Paper No./Mail Date _____.

b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

]
 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

chment(s)

Notice of References Cited (PTO-892)

5. Notice of Informal Patent Application (PTO-152)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

6. Interview Summary (PTO-413),
 Paper No./Mail Date 4/19/04

Information Disclosure Statements (PTO-1449 or PTO/SB/08),
 Paper No./Mail Date _____

7. Examiner's Amendment/Comment

Examiner's Comment Regarding Requirement for Deposit
 of Biological Material

8. Examiner's Statement of Reasons for Allowance

9. Other _____.

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2 , and 20-21 drawn to isolated polypeptides encoding human kinases, classified in class 435, subclass 194.
- II. Claim 3, and 12 drawn to antibodies which bind said kinases and methods of use of said antibodies, classified in class 435, subclass 7.1.
- III. Claims 4 -6, 8-11 and 22-23 drawn to isolated nucleic acids encoding said kinases, vectors , gene chips and host cells comprising said nucleic acids and methods of expressing said nucleic acids, classified in class 435, subclass 194.
- IV. Claim 7, drawn to a transgenic non-human animal comprising said nucleic acids, classified in class 800, subclass 8.
- V. Claim 13, drawn to methods of detecting nucleic acids utilizing said kinase encoding nucleic acids as probes in a hybridization assay, classified in class 435, subclass 6.
- VI. Claims 14-16 and 19, drawn to methods of identifying compounds that bind or modulate the activity or expression of said kinases, classified in class 435, subclass 15.
- VII. Claim 17, drawn to a pharmaceutical composition comprising the modulators of said kinases, classification unknown. This is because classification depends on the structure of modulators. Since applicant did not define the structure of said modulators classification is not possible.

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VIII. Claim 18, drawn to methods of treatment comprising utilizing the modulators of said kinases, classified in class 514, subclass 789.

The inventions are distinct, each from the other because of the following reasons:

The polypeptides of Group I, the antibodies of Group II, the DNA of Group III, the transgenic animal of Group IV, and the modulators of Group VI are each patentably distinct from the other because each product has an independent chemical structure and function.

The polypeptides of Group I and the antibodies of Group II, the transgenic animal of Group III are each unrelated to the methods of Group V, VII or VIII because said products are neither made nor used by said methods.

Inventions III and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Group III can be used in recombinant production of polypeptides which is a totally different method than the hybridization assay of Group V.

The DNA of Group III is unrelated to the methods of Group VI or VIII because said product is neither made nor used by said methods.

Inventions VII and VI or VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1)

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the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case antibodies may be used for identifying modulators of Group VI or for treatment of diseases mediated by said kinases of Group VIII which are entirely different products than the modulators of Group VII.

The modulators of Group VII are unrelated to the method of Group V because said products are neither made nor used by said method.

Methods of Group V, VII and VIII are each patentably distinct from the other because each method has different steps and different end-points.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter as shown by their separate classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

During a telephone conversation with Mr. Justin D. Karjala on 4/20/2004 a provisional election was made without traverse to prosecute the invention of Group III, claims 4-6, 8-11, 22-23. Affirmation of this election was made by applicant in this preliminary amendment. Claims 1-3, 7, 12-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Examiner's Amendments to the Specification

In page 7, line 1, delete "FIGURE 1" and substitute therefor --- Figures 1A-1B ---.

In page 7, line 8, delete "FIGURE 2" and substitute therefor --- Figures 2A-2L ---.

In page 7, line 1, delete "FIGURE 3" and substitute therefor --- Figures 3A-3C ---.

The following is an **Examiner's Statement of Reasons for Allowance:**

Claims 24, 27-49 are directed to isolated nucleic molecules comprising DNA sequences encoding a specific human kinase from myosin light chain family of kinases (MLCK), isolated DNA sequences consisting of or comprising DNA sequences encoding specific variants of said kinase, vectors and host cells comprising all said products and methods of expressing said products.

DNA molecules as specifically claimed are free of prior art. Further, the prior art does not teach or suggest preparing such specifically claimed DNA molecules. Hence said molecules are also non-obvious. Since claimed products are both novel and non-

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obvious, vectors and host cell s comprising said products and methods of expressing said products are also novel and non-obvious.,

Claims 24 and 27-49 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on 7:00 a.m to 4:30 p.m. except for alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnanthapu Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maryam Monshipouri Ph.D.

Primary Examiner
